Huddle

The Team
Joe Polin: User Testing and Documentation
Michael Weingert: Developer
Brandon Evans: Designer
Nadav Lidor: Manager

Introduction:
People get stuck in familiar routines because familiarity is comforting. As a result, they miss out on discovering new possibilities that may enrich their lives. This problem is compounded by the pains of planning and organizing. Scheduling friends, finding common availabilities, and booking reservations are just a few of the headaches that dissuade people from exploring and discovering new things. Huddle eliminates many of these headaches by proposing events based on a user’s preferences and seamlessly organizing and scheduling outings with friends. The hassle of communicating with multiple friends and trying to get everyone to agree on one event becomes quick and painless because Huddle acts as a third party mediator of sorts. It guides everyone to a common decision through a structured and fair voting process.

Mission Statement:
Huddle’s mission is to remove the hassles of event creation and scheduling and make it easy to discover and explore with friends.

Prototype Description:
The prototype description was a series of screen printed on a piece of black paper to look like a black phone. Users interacted with the screen as shown in Figure 1 to the left.

Figure 1: Overview of Prototype
After making certain gestures, the screen would be updated in real time through pencil. There were a series of printed out screens that were blank, and could easily be updated to reflect a users choice. This updating action is shown in Figure 2 to the left.

User Flow:

The general flow for the testing is

Main screen: Choose to examine an event or create a new event

If a user selects to examine an event they are brought into a detailed event preview. If a user selects to create a new event, they are brought through the event creation flow.

The event creation flow is to:

1) Pick a friend group
2) Select a date
3) Vote on the event that you are interested in
4) Wait as your friends have indicated their likes, which get updated in real time.
Screens:

The first screen is the home screen. Users can click on the + button to add a new event. Otherwise, they see a list of their events and can click on the event description to vote. This screen is shown to the left in Figure 3.

Figure 3: Huddle Main Page

Clicking on the soccer event (the first one) will bring the users to the event description screen. This event description screen is shown in Figure 4 to the left. This event description screen allows users to see the cost of the event, who is attending, the ratings (votes), as well as map information.

Figure 4: Event description page
Alternatively, from the home screen users can click the + button which will take them to the first step in the event creation process.

In this screen, users first select a group to huddle with (or individual users). Alternatively, users can make a new group, or add different friends.

At the bottom is the “Go Solo” button which will allow users to go on the event by themselves. This screen is shown to the left in Figure 5.

The next screen in the event creation flow is to select an event time. Users select a date and select morning, afternoon, or evening. Hitting next brings them to the final screen in the event creation flow. This event time screen is shown in Figure 6 to the left.
Users receive event suggestions that are curated to them. This list is where users vote on events they are interested in (by clicking on the star) or click on the new event button to enter something else in manually. This screen is shown in Figure 7 on the left.

Through real time voting amongst their friends, the likes on each event changes to reflect their friends and the events they have selected. This updating is shown in Figure 8 to the left.
Method

The paper prototype was tested with three people who fit the target user group. All three participants were in their early 20’s and regularly rely on mobile devices to find and coordinate social events. The users were all Stanford graduate students, but varied in a number of other important respects. See Table 1 for more specific information.

<table>
<thead>
<tr>
<th>User</th>
<th>Age</th>
<th>Gender</th>
<th>Years at Stanford</th>
<th>Degree and Dept.</th>
</tr>
</thead>
<tbody>
<tr>
<td>User 1</td>
<td>26</td>
<td>Male</td>
<td>&lt; 1</td>
<td>MBA</td>
</tr>
<tr>
<td>User 2</td>
<td>25</td>
<td>Female</td>
<td>&lt; 1</td>
<td>MS in Civil Eng.</td>
</tr>
<tr>
<td>User 3</td>
<td>22</td>
<td>Male</td>
<td>3</td>
<td>PhD in Aero</td>
</tr>
</tbody>
</table>

*Table 1: Brief overview of the demographics involved in the user study.*

The tests were conducted in a quiet environment where conversation could be had freely. A table was also necessary due to the nature of the prototype. All three users agreed to participate without compensation.

The tests were conducted as follows: The test subject was given a brief overview of the application and its general purpose in order to help them understand the context. Next, the subject was shown the home screen and how to view a pending outing. No major tasks were performed during this quick demonstration. Users were instructed to think out loud as much as possible and voice thoughts, uncertainties, etc. A webcam pointed at the table recorded both their actions and dialogue for reviewing later. See the Appendix for a copy of the script used with each subject.

Next, the subject was prompted to create an outing for him/her and his/her friends. Once they completed this successfully, they were instructed to respond to an outing invitation. Lastly, after they had completed this scenario, they were told to use the app to find something to do alone. These three scenarios allowed all three of the major tasks to be tested, sometimes multiple times. The tasks being tested were scheduling, communication (voting), and interacting with an event list. The most important measure of success for each task was how easily and smoothly users transitioned from one step to the next, and whether they felt empowered or constrained by the interface offered to them. While this sounds like a rather subjective measurement, subjects proved very willing to voice feedback about every screen.
Results

The results were overall positive, with subjects expressing satisfaction with the layout and flow of the application. The workflow for creating an outing appeared easy to figure out. Generally, after working through the first scenario, subjects had a strong sense of how the app worked and navigated very easily.

That said, there were a number of clear shortcomings that confused, handicapped, or frustrated subjects. See Table 2 for a log of the critical incidents compiled from the three users.

<table>
<thead>
<tr>
<th>Critical Incident</th>
<th>Severity Rating</th>
<th>Experienced by user(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Next’ button on calendar screen; month- or page-next?</td>
<td>2</td>
<td>1, 3</td>
</tr>
<tr>
<td>Does tapping on event vote or open info?</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Outing selection on home screen; vote button confusing</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>New Event on event feed seems out of place</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Inconsistent terminology: event, outing, activity, etc.</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Name of outing happens automatically? How?</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>What does Leave mean on event page?</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Did not consider voting for multiple events or voting directly on event page.</td>
<td>2</td>
<td>2, 3</td>
</tr>
<tr>
<td>No intuitive interaction on event page when going solo</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Outing creator should be able to propose events first.</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

*Table 2: Critical incidents experienced during studies. Not the following codes for severity: 0=no problem, 1=cosmetic problem, 2= minor usability problem, 3=major usability problem, 4=usability catastrophe.*

Discussion

The user study was helpful for testing both big-picture design choices as well as the layouts of each individual screen. In both cases, subjects provided a mix of positive and constructive feedback that will drive much of the design in the next prototype.
In terms of the flow of the application, users felt that creating an outing was generally intuitive and easy to do. The main issue, it seemed, was at the end of the process, users found themselves looking at an event list with nothing to do. Particularly in the solo case, when users did not need to vote, they felt unsure about the “next step.” Part of this may have been due to the fact that they were being recorded/observed, and felt compelled to be “doing” something. Nonetheless, it is worth brainstorming ways that a solo user can still interact with the event list.

Most spots of confusion resulted from ambiguously-named buttons, such as “Leave,” “Vote,” and “Next.” These are primarily cosmetic or minor problems. The buttons may need to be named or placed differently in light of this new understanding of users’ mindsets on each screen. For instance, while on the Home screen, most users seemed compelled to see the event lists, not necessarily vote for them (even if that urge automatically kicked in once on the screen with events).

Given the low-fidelity nature of this prototype, not everything could be tested. For instance, creating events or choosing new events from a curated list of suggested events were beyond the scope of this prototype. We also could not test the options such as “edit event” or “create new friends list.” These will need to be explored and tested later on.
APPENDIX

Script:

- Background:

  “Thank you for volunteering to test our early prototype of our app. The general purpose of the app is to help customers, like yourself, participate in social outings. To be a bit more specific, our interface allows you to coordinate with friends to find an event that is the most favorable for the group.”

- Brief demo (show how to see upcoming events):

  “Here is the home screen (show home screen). This list shows you what outings are currently being planned. From here, you can create a new outing and also receive invites from friends who have initiated outings.

Let’s click on one (tap one of the events, switch to event leaderboard). These show the events and activities that your group is considering for October 31. You can see what they are, and how many votes they have. You can also select them for more information (don’t actually click--let them try later).”

- First Task: Create outing

  (Take back to home screen). Alright, so I would like you to go ahead and set-up an outing for you and your friends.

  Do you have any feedback about what was easy, hard, intuitive, confusing about that task?

- Second Task: Reply to invitation

  (Reset to home screen). You see on your home screen that you’ve received an invitation for an outing. Go ahead and join the event and indicate your preferences.

  Do you have any feedback about what was easy, hard, intuitive, confusing about that task?
- Third Task: Create solo event

  *(Reset to home screen).* You would like to spend the day on your own. Go ahead and use the app to find something to do on your own.

  Do you have any feedback about what was easy, hard, intuitive, confusing about that task?

- Wrap Up

  Do you have any feedback, either specifically about the interface or overall about the functionality of the app?

  Do you see yourself actually using a tool like this for any of the 3 scenarios that we just played out?

  Thank you for your time.